

Message

---

**From:** Aubee, Catherine [Aubee.Catherine@epa.gov]  
**Sent:** 6/12/2017 8:57:06 PM  
**To:** Henry, Tala [Henry.Tala@epa.gov]  
**Subject:** [FYI] MORE QUESTIONS ON GEN X: DDL TODAY, 6/12 @ 3 PM

FYI -

Begin forwarded message:

**From:** "Canavan, Sheila" <Canavan.Sheila@epa.gov>  
**Date:** June 12, 2017 at 4:55:15 PM EDT  
**To:** "Pierce, Alison" <Pierce.Alison@epa.gov>  
**Cc:** "Doa, Maria" <Doa.Maria@epa.gov>, "Schweer, Greg" <Schweer.Greg@epa.gov>, "Krasnic, Toni" <krasnic.toni@epa.gov>, "Mayo, Kelly" <Mayo.Kelly@epa.gov>, "Wolf, Joel" <Wolf.Joel@epa.gov>, "Aubee, Catherine" <Aubee.Catherine@epa.gov>  
**Subject:** RE: MORE QUESTIONS ON GEN X: DDL TODAY, 6/12 @ 3 PM

Here you go Alison. Maria has reviewed.

*Has DuPont and/or Chemours satisfied all the requirements for submitting toxicological/environmental studies?*

## Ex. 5 - Deliberative Process

*Where can I obtain those?*

## Ex. 5 - Deliberative Process

*Have any changes been made to the consent order since it was issued, including changes in amounts allowed to be manufactured and monitoring? If so, who sought the changes and what are they?*

## Ex. 5 - Deliberative Process

*5) The consent order includes this exception: (3) Byproducts. The requirements of this Order do not apply to the PMN substances when they are produced, without separate commercial intent, only as a "byproduct" as defined at 40 CFR 720.3(d) and in compliance with 40 CFR 720.30(g).*

*Here are those federal register entries:*

*40 CFR 720.3(d) Byproduct means a chemical substance produced without a separate commercial intent during the manufacture, processing, use, or disposal of another chemical substance or mixture.*

*40 CFR 720.30(g) Any byproduct if its only commercial purpose is for use by public or private organizations that (1) burn it as a fuel, (2) dispose of it as a waste, including in a landfill or for enriching soil, or (3) extract component chemical substances from it for commercial purposes. (This exclusion only applies to the byproduct; it does not apply to the component substances extracted from the byproduct.)*

*If GenX were generated as a byproduct in a process not meant to produce it and in which it was not extracted for commercial use, would this exception apply?*

## Ex. 5 - Deliberative Process

---

**From:** Pierce, Alison

**Sent:** Monday, June 12, 2017 12:02 PM

**To:** Canavan, Sheila <Canavan.Sheila@epa.gov>

**Subject:** MORE QUESTIONS ON GEN X: DDL TODAY, 6/12 @ 3 PM

**Importance:** High

Sheila –

We've got more questions on GenX, the press inquiry that keeps on giving. Full suite of questions in the chain below (we're asking OECA to field 1-3) – but looks like we're on the hook for 4&5.

*4) Has DuPont and/or Chemours satisfied all the requirements for submitting toxicological/environmental studies? Where can I obtain those? Have any changes been made to the consent order since it was issued, including changes in amounts allowed to be manufactured and monitoring? If so, who sought the changes and what are they?*

*5) The consent order includes this exception: (3) Byproducts. The requirements of this Order do not apply to the PMN substances when they are produced, without separate commercial intent, only as a "byproduct" as defined at 40 CFR 720.3(d) and in compliance with 40 CFR 720.30(g).*

*Here are those federal register entries:*

*40 CFR 720.3(d) Byproduct means a chemical substance produced without a separate commercial intent during the manufacture, processing, use, or disposal of another chemical substance or mixture.*

*40 CFR 720.30(g) Any byproduct if its only commercial purpose is for use by public or private organizations that (1) burn it as a fuel, (2) dispose of it as a waste, including in a landfill or for enriching soil, or (3) extract component chemical substances from it for commercial purposes. (This exclusion only applies to the byproduct; it does not apply to the component substances extracted from the byproduct.)*

*If GenX were generated as a byproduct in a process not meant to produce it and in which it was not extracted for commercial use, would this exception apply?*

Deadline to OPA is 3pm today, but we're pushing back on that. Let me know what's reasonable from your perspective – thanks.

Alison

---

**From:** Dunton, Cheryl  
**Sent:** Monday, June 12, 2017 11:46 AM  
**To:** Pierce, Alison <[Pierce.Alison@epa.gov](mailto:Pierce.Alison@epa.gov)>  
**Subject:** FW: MEDIA INQUIRY - StarNews. GenX. DDL TODAY, 6/12 @ 3 PM

---

**From:** Lynn, Tricia  
**Sent:** Monday, June 12, 2017 11:23 AM  
**To:** Dunton, Cheryl <[Dunton.Cheryl@epa.gov](mailto:Dunton.Cheryl@epa.gov)>  
**Subject:** FW: MEDIA INQUIRY - StarNews. GenX. DDL TODAY, 6/12 @ 3 PM

Hi Cheryl—

I see that you're filling in for Linda while she's out. Can you help with what's below please?

Thank you!

--Tricia

---

Tricia Lynn  
Office of Public Affairs  
U.S. EPA  
Office: 202.564.2615

---

**From:** Lynn, Tricia  
**Sent:** Monday, June 12, 2017 11:22 AM  
**To:** Strauss, Linda <[Strauss.Linda@epa.gov](mailto:Strauss.Linda@epa.gov)>  
**Subject:** MEDIA INQUIRY - StarNews. GenX. DDL TODAY, 6/12 @ 3 PM

Deadline: TODAY, 6/12/17 @ 3 PM  
Outlet: StarNews (Wilmington, NC)  
Reporter: Vaughn Hagerty  
[vaughn.hagerty@gmail.com](mailto:vaughn.hagerty@gmail.com)

Hi Linda—

I understand from OECA that these follow-up questions (below, in yellow) are for OCSPP. I've included the whole chain in case it helps, however.

Thanks so much,

Tricia

**From:** Vaughn Hagerty [<mailto:vaughn.hagerty@gmail.com>]  
**Sent:** Monday, June 12, 2017 8:45 AM  
**To:** Valentine, Julia <[Valentine.Julia@epa.gov](mailto:Valentine.Julia@epa.gov)>  
**Cc:** Press <[Press@epa.gov](mailto:Press@epa.gov)>  
**Subject:** Re: EPA Inquiry RE: GenX, PFASs in the Cape Fear River watershed

Hi, Julia. I'd like to at least address 1), 2) and 5), as well as whether EPA has or is contemplating any action as a result of these findings and, if so, what that action might be.

I'm writing a story that will go online today and in print tomorrow. I submitted a number of these questions more than a week ago to Enesta in response to what she sent, so they aren't all entirely new to EPA.

If it would help, I'd be happy to get on the phone with anyone there.

Regards,

Vaughn Hagerty

On Mon, Jun 12, 2017 at 8:36 AM, Valentine, Julia <[Valentine.Julia@epa.gov](mailto:Valentine.Julia@epa.gov)> wrote:

Thanks, Vaughn. We have your request. Is that deadline of today a hard deadline?

Julia P. Valentine

Assoc. Dir./Acting Dir.  
U.S. EPA, Ofc of Media Relations

[202.564.2663](tel:202.564.2663) direct

[202.740.1336](tel:202.740.1336) m/txt

**From:** Vaughn Hagerty [mailto:[vaughn.hagerty@gmail.com](mailto:vaughn.hagerty@gmail.com)]

**Sent:** Monday, June 12, 2017 7:43 AM

**To:** Press <[Press@epa.gov](mailto:Press@epa.gov)>

**Subject:** Fwd: EPA Inquiry RE: GenX, PFASs in the Cape Fear River watershed

My name is Vaughn Hagerty and I'm a journalist working with the StarNews newspaper in Wilmington, N.C. We've been writing a number of stories regarding the Chemours plant near Fayetteville, N.C., and the discovery of GenX in the Cape Fear River and in the water system of at least one downstream community. We've cited these studies, both of which include participation by EPA researchers:

[https://www.researchgate.net/publication/282129345\\_Identification\\_of\\_Novel\\_Perfluoroalkyl\\_Ether\\_Carboxylic\\_Acids\\_PFECAs\\_and\\_Sulfonic\\_Acids\\_PFESAs\\_in\\_Natural\\_Waters\\_Using\\_Accurate\\_Mass\\_Time-of-Flight\\_Mass\\_Spectrometry\\_TOFMS](https://www.researchgate.net/publication/282129345_Identification_of_Novel_Perfluoroalkyl_Ether_Carboxylic_Acids_PFECAs_and_Sulfonic_Acids_PFESAs_in_Natural_Waters_Using_Accurate_Mass_Time-of-Flight_Mass_Spectrometry_TOFMS)

[https://www.researchgate.net/publication/309887015\\_Legacy\\_and\\_Emerging\\_Perfluoroalkyl\\_Substances\\_Are\\_Important\\_Drinking\\_Water\\_Contaminants\\_in\\_the\\_Cape\\_Fear\\_River\\_Watershed\\_of\\_North\\_Carolina](https://www.researchgate.net/publication/309887015_Legacy_and_Emerging_Perfluoroalkyl_Substances_Are_Important_Drinking_Water_Contaminants_in_the_Cape_Fear_River_Watershed_of_North_Carolina)

I had been working with Enesta Jones, but she apparently is on vacation. I am working on a story that has a deadline of 4 p.m. Eastern today, June 12.

First, I'm curious if EPA has taken or is contemplating any action as a result of these discoveries. I'd asked this question of Enesta, but the response cited the fact that these are emerging substances that aren't regulated and seemed to indicate no action would result. Is that still the case?

Second, I have a number of questions regarding the consent order issued by EPA to DuPont (now Chemours) for the manufacture of GenX:

1) In her response, Enesta stated: "In its review of the GenX premanufacture submission, EPA determined that the chemical could be commercialized if there were no releases to water." I pointed out that, as detailed in the studies cited above, it *is* in the water. So what happens now from EPA's standpoint? Is Chemours in violation of the consent order? What does that mean?

2) Enesta's response stated: "DuPont is required to recover and capture (destroy) or recycle the chemical from all the process wastewater effluent streams and air emissions (point source and fugitive) at an overall efficiency rate of 99% (i.e., 99% of the chemical can't be released into the environment)." It's difficult to understand what this "efficiency rate" means without knowledge of the manufacturing limits for the product. What are the manufacturing limits? How would it be monitored and enforced? Does DuPont and/or Chemours provide regular reports about its compliance? If so, how would I obtain those reports?

3) How are the overall terms of such a consent order enforced? Who is responsible? What is the process?

4) Has DuPont and/or Chemours satisfied all the requirements for submitting toxicological/environmental studies? Where can I obtain those? Have any changes been made to the consent order since it was issued, including changes in amounts allowed to be manufactured and monitoring? If so, who sought the changes and what are they?

5) The consent order includes this exception: (3) Byproducts. The requirements of this Order do not apply to the PMN substances when they are produced, without separate commercial intent, only as a "byproduct" as defined at 40 CFR 720.3(d) and in compliance with 40 CFR 720.30(g).

Here are those federal register entries:

40 CFR 720.3(d) Byproduct means a chemical substance produced without a separate commercial intent during the manufacture, processing, use, or disposal of another chemical substance or mixture.

40 CFR 720.30(g) Any byproduct if its only commercial purpose is for use by public or private organizations that (1) burn it as a fuel, (2) dispose of it as a waste, including in a landfill or for enriching soil, or (3) extract component chemical substances from it for commercial purposes. (This exclusion only applies to the byproduct; it does not apply to the component substances extracted from the byproduct.)

If GenX were generated as a byproduct in a process not meant to produce it and in which it was not extracted for commercial use, would this exception apply?

Note that Enesta's response is forwarded below.

Regards,

Vaughn Hagerty

----- Forwarded message -----

From: **Jones, Enesta** <[Jones.Enesta@epa.gov](mailto:Jones.Enesta@epa.gov)>

Date: Thu, Jun 1, 2017 at 7:41 PM

Subject: RE: EPA Inquiry RE: GenX, PFASs in the Cape Fear River watershed

To: Vaughn Hagerty <[vaughn.hagerty@gmail.com](mailto:vaughn.hagerty@gmail.com)>

Cc: Press <[Press@epa.gov](mailto:Press@epa.gov)>

Hi Vaughn,

Thanks for your patience. Please attribute our response below to an agency spokesperson:

Figure 2 of the paper specifically illustrates that GenX only makes up a small percentage of the total PFAS that were determined in this study. Many of these chemicals have very little data on which to make a judgement regarding their potential toxicity.

EPA received the chemical substance referred to as GenX as a new chemical notice from DuPont (which is now Chemours) in 2008. The substance is a perfluoroether derivative. EPA and the company signed a Consent Order in 2009 for the substance which required health and environmental testing, and also controlled worker exposures, environmental releases and the amount of impurities permissible in the final polymers. A Consent Order can require testing and restrictions as conditions. The Agency is analyzing the data it has received under the Consent Order.

In its review of the GenX premanufacture submission, EPA determined that the chemical could be commercialized if there were no releases to water. Under the terms of the Consent Order, for operations in the United States, DuPont is required to recover and capture (destroy) or recycle the chemical from all the process wastewater effluent streams and air emissions (point source and fugitive) at an overall efficiency rate of 99% (i.e., 99% of the chemical can't be released into the environment). Further, under the terms of the Consent Order, Dupont may only distribute the chemical to those customers, such as manufacturers and processors, that can also achieve this percentage of efficiency or destruction. An important next step is verifying the source of

**Locally:** Pittsboro indicated that they recently installed a 24/7 PAC Feed System, which is an effective treatment option for PFOA/PFOS. They also plan to conduct confirmatory sampling, which would provide results about the current PFOA/PFOS levels in the finished water. To date, Region 4 does not have any confirmatory sampling data for the Pittsboro community.

In December 2016, Region 4 reached out to the North Carolina Department of Health and Human Services (NC DHHS) to determine their awareness of the advisory and its recommendations. The Health Department acknowledged familiarity with the advisory but stated that they did not have authority to get involved. They stated they find the advisories difficult to implement at the state level, since they aren't regulated compounds.

Although Region 4 has confirmed that NC DEQ, NC DHHS and Town of Pittsboro are aware of the Final Health Advisory's recommendations, the sensitive population has not been notified in the Pittsboro community.

**Nationally:** EPA is evaluating PFOA and PFOS as drinking water contaminants in accordance with the process required by the Safe Drinking Water Act (SDWA). To regulate a contaminant under SDWA, EPA must find that it: (1) may have adverse health effects; (2) occurs frequently (or there is a substantial likelihood that it occurs frequently) at levels of public health concern; and (3) there is a meaningful opportunity for health risk reduction for people served by public water systems.

EPA included PFOA and PFOS among the contaminants for which water systems are required to monitor under the third Unregulated Contaminant Monitoring Rule (UCMR 3) in 2012. Results of this monitoring effort can be found on the publicly-available [National Contaminant Occurrence Database \(NCOD\)](#). In accordance with SDWA, EPA will consider the occurrence data from UCMR 3, along with the peer reviewed health effects assessments supporting the PFOA and PFOS Health Advisories, to make a regulatory determination on whether to initiate the process to develop a national primary drinking water regulation.

EPA has conducted monitoring in the Cape Fear River Watershed for perfluorinated compounds. At this time, EPA Region 4 cannot advise on GenX compounds since the EPA does not have a drinking water advisory for these compounds. As noted in #3, EPA is evaluating PFOS and PFOA under the requirements of SDWA.

In 2006, EPA Region 4 has conducted research of perfluorinated compounds in the Cape Fear Watershed. At that time, our investigations did not show impacts of concern to surface water or groundwater; therefore, did not contact the plant operator. Since the paper was published, EPA Region 4 has not contacted the plant operator regarding the findings.

**Enesta Jones**

**U.S. EPA**

**Office of Media Relations**



Office: 202.564.7873

Cell: 202.236.2426

**"The root of all joy is gratefulness."**

**From:** Vaughn Hagerty [<mailto:vaughn.hagerty@gmail.com>]

**Sent:** Tuesday, May 30, 2017 12:02 PM

**To:** Jones, Enesta <[Jones.Enesta@epa.gov](mailto:Jones.Enesta@epa.gov)>

**Subject:** Re: EPA Inquiry RE: GenX, PFASs in the Cape Fear River watershed

Hi, Enesta. I'm checking again to see if there's any progress on this.

-Vaughn Hagerty

On Thu, May 25, 2017 at 7:24 AM, Jones, Enesta <[Jones.Enesta@epa.gov](mailto:Jones.Enesta@epa.gov)> wrote:

Hi Vaughn,

My apologies for the delay. This has been an effort involving three program offices and one regional office.

I hope to have a response to you today. Thanks again for your patience.

**Enesta Jones**

**U.S. EPA**

**Office of Media Relations**

Office: 202.564.7873

Cell: 202.236.2426

**"The root of all joy is gratefulness."**

On May 25, 2017, at 7:22 AM, Vaughn Hagerty <[vaughn.hagerty@gmail.com](mailto:vaughn.hagerty@gmail.com)> wrote:

Enesta,

I'm still interested in some response from EPA. Can you provide me with a more detailed update, such as if and/or when I might expect answers to my questions?

Regards,

Vaughn Hagerty

On Mon, May 22, 2017 at 2:25 PM, Jones, Enesta <[Jones.Enesta@epa.gov](mailto:Jones.Enesta@epa.gov)> wrote:

Hi Vaughn,

I am checking.

Enesta Jones

**U.S. EPA**

**Office of Media Relations**

**Office: 202.564.7873**

**Cell: 202.236.2426**

**"The root of all joy is gratefulness."**

On May 22, 2017, at 2:11 PM, Vaughn Hagerty  
<[vaughn.hagerty@gmail.com](mailto:vaughn.hagerty@gmail.com)> wrote:

Hi, Enesta. Any update on this?

-Vaughn Hagerty

On Thu, May 18, 2017 at 6:42 PM, Vaughn Hagerty  
<[vaughn.hagerty@gmail.com](mailto:vaughn.hagerty@gmail.com)> wrote:

Yes, that would work. Thanks!

-Vaughn

On Thu, May 18, 2017 at 4:06 PM, Jones, Enesta  
<[Jones.Enesta@epa.gov](mailto:Jones.Enesta@epa.gov)> wrote:

Hi Vaughn,

Is getting back to you the morning of May 22 ok?

**Enesta Jones**

**U.S. EPA**

**Office of Media Relations**

**Office: 202.564.7873**

**Cell: 202.236.2426**

**"The root of all joy is gratefulness."**

---

**From:** Jones, Enesta

**Sent:** Wednesday, May 17, 2017 2:24 PM

**To:** Vaughn Hagerty <[vaughn.hagerty@gmail.com](mailto:vaughn.hagerty@gmail.com)>

**Subject:** Re: EPA Inquiry RE: GenX, PFASs in the Cape Fear River watershed

Hi Vaughn,

I am checking. Thanks.

**Enesta Jones**

**U.S. EPA**

**Office of Media Relations**

**Office: 202.564.7873**

**Cell: 202.236.2426**

**"The root of all joy is gratefulness."**

On May 17, 2017, at 2:23 PM, Vaughn Hagerty  
<[vaughn.hagerty@gmail.com](mailto:vaughn.hagerty@gmail.com)> wrote:

Hi, Enesta.

I'm hoping to complete my interviews by Monday, May 22. The story is currently set to run in late May or early June.

The lead author (Mei Sun) has confirmed that the treatment plant at Community C in the paper is the Cape Fear Public Utility Authority in Wilmington, N.C. I'd like to know how someone in the community served by CFPUA should interpret these results, specifically in terms of the concentrations of GenX.

According to the paper, median concentrations were 671 ppb. I'm asking this in the context of EPA's latest advisory level for PFOA/PFOS, which GenX is meant to replace. As I understand it, the advisory level for PFOA/PFOS is 70 ppt. GenX was present at several times that concentration. Does this raise any health concerns at all? Is this nothing to be concerned about?

What is the status of EPA's review of the environmental and human safety of GenX? What is the EPA's current position regarding the safety of GenX?

Has or will the EPA take any actions regarding the results from this paper? Is the EPA monitoring the situation and/or conducting its own tests regarding GenX in the Cape Fear River watershed? If so, what, specifically is or will it do and when? If nothing is has been done or is planned, why not? What would it take for the EPA to get involved regarding this situation?

The lead author has confirmed that the fluorochemical manufacturer located upstream of the CFPUA is a plant in Fayetteville, N.C., formerly owned by DuPont and now by Chemours. Has the EPA contacted the plant operator regarding these findings? If so, what was the nature of that communication? If not, why not?

There was a photo that ran in The Intercept (<https://theintercept.com/2016/03/03/how-dupont-concealed-the-dangers-of-the-new-teflon-toxin/>) of Mark and Andrew. I'd like to get a copy to run with this story.

Regards,

Vaughn Hagerty

On Wed, May 17, 2017 at 1:37 PM, Jones, Enesta <[Jones.Enesta@epa.gov](mailto:Jones.Enesta@epa.gov)> wrote:

Hi Vaughn,

Thanks for reaching out.

Can you please provide specific questions and firm deadline?

**From:** Vaughn Hagerty  
[<mailto:vaughn.hagerty@gmail.com>]  
**Sent:** Wednesday, May 17, 2017 9:43 AM  
**To:** Lindstrom, Andrew  
<[Lindstrom.Andrew@epa.gov](mailto:Lindstrom.Andrew@epa.gov)>; Strynar, Mark  
<[Strynar.Mark@epa.gov](mailto:Strynar.Mark@epa.gov)>  
**Subject:** GenX, PFASs in the Cape Fear River watershed

Messrs. Lindstrom and Strynar:

My name is Vaughn Hagerty and I'm a journalist working on a story for the StarNews in Wilmington about PFASs, including GenX, in some drinking water systems in New Hanover and Brunswick counties. Among other sources, I'm referencing the paper "Legacy and Emerging Perfluoroalkyl Substances Are Important Drinking Water Contaminants in the Cape Fear River Watershed of North Carolina."

I've interviewed Professor Sun and am scheduled to speak with Professor Knappe this week. I'd like to discuss the issue with one or both of you, as well, either by phone or via email exchange. Is this something we can arrange?

Regards,

Vaughn Hagerty

**Enesta Jones**

**U.S. EPA**

**Office of Media Relations**

**Office: 202.564.7873**

**Cell: 202.236.2426**

**"The root of all joy is gratefulness."**

.....  
.....

.....